ALL. B

Procedura valutativa per la copertura di n. 1 posto di Professore Universitario di seconda fascia per il Settore concorsuale 11/E1 – Settore scientifico-disciplinare M-PSI/02 presso il Dipartimento di Biologia e Biotecnologie 'Charles Darwin' – Facoltà di Scienze Matematiche Fisiche e Naturali – codice concorso 2021PAR036

Decreto Rettore Università di Roma "La Sapienza" n **2157/2021** del **02.08.2021**

ARIANNA RINALDI

Curriculum Vitae

Place: Rome
Date: 9/08/2021
Signature: Arianna Rinaldi

Part I – General Information

E-mail	arianna.rinaldi@uniroma1.it
Spoken Languages	Italian, English

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,…)
University graduation	2004	Sapienza University of Rome	**Bachelor in Biological Sciences** (master equivalent), 110/110 *cum laude*
PhD	2007	Sapienza University of Rome	**Ph.D. in Psychobiology and Psychopharmacology**
National Scientific Qualification	2020	Italian Ministry for Education, University and Research (MIUR)	National Scientific Qualification as Associate Professor (**Professore di II fascia, SC 11/E1, SSD M-PSI/02 Psicologia generale, Psicobiologia e Psicometria**, Bando D.D. 2175/2018, validità **dal 10/07/2020 al 10/07/2029**)

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
02/2014	02/2014	University of Edinburgh - Centre for Integrative Physiology	**Visiting researcher** (RSE exchange fellow - 3 weeks)
2013	2017	Sapienza University of Rome	**Member of the Faculty, Ph.D. Program in Behavioural Neuroscience** (curriculum of Psychobiology and Psychopharmacology)

01/2012	07/2012	University of Edinburgh - Centre for Integrative Physiology	**Visiting researcher** (Laboratory of Dr. M.F. Nolan) (Congedo straordinario per giustificate ragioni di studio senza assegni D.R 13 dicembre 2001 n. 4367)
06/2012	Present	Sapienza University of Rome	**Member of the Centre for Research in Neurobiology "D. Bovet"**
12/2011	Present	Sapienza University of Rome	**Assistant Professor** (**Ricercatore Universitario - SSD M-PSI/02**), Dept. of Biology and Biotechnology "C.Darwin"
01/2008	12/2011	University of Edinburgh - Centre for Integrative Physiology	**Postdoctoral research fellow** (Marie Curie Excellence Team, Wellcome Trust Project Grant, Laboratory of Dr. M.F. Nolan)
10/2004	12/2007	Sapienza University of Rome	**Ph.D. student** (Laboratory of Psychobiology, Dept. of Genetics and Molecular Biology)
03/2004	04/2004	University of Amsterdam Swammerdam Institute for Life Sciences	**Visiting student** (Laboratory of Dr. A. Mulder)
01/2002	07/2004	Sapienza University of Rome	**Undergraduate student** (Laboratory of Psychobiology, Dept. of Genetics and Molecular Biology)

IIIB – Other Appointments

Start	End	Institution	Position
01/2012	03/2018	National Research Council (CNR) - Institute of Cell Biology and Neurobiology (IBCN)	**Research Associate**

Part IV – Teaching experience

Year	Institution	Lecture/Course
2020-2021	Sapienza University of Rome	**Course "Introduction to Neuroscience"** (SSD M-PSI/02, **6 CFU**), Bachelor in Biological Sciences
2020-2021	Sapienza University of Rome	**Course "Methods in Behavioural Neuroscience"** (SSD M-PSI/02, **6 CFU**), LM in Neurobiology
2019-2020	Sapienza University of Rome	**Course "Introduction to Neuroscience"** (SSD M-PSI/02, **6 CFU**), Bachelor in Biological Sciences
2019-2020	Sapienza University of Rome	**Course "Methods in Behavioural Neuroscience"** (SSD M-PSI/02, **6 CFU**), LM in Neurobiology
2018-2019	Sapienza University of Rome	**Course "Methods in Behavioural Neuroscience"** (SSD M-PSI/02, **3 CFU**, Module II), LM in Neurobiology
2017-2018	Sapienza University of Rome	**Course "Methods in Behavioural Neuroscience"** (SSD M-PSI/02, **3 CFU**, Module II), LM in Neurobiology
2017	Sapienza University of Rome	**Lectures** for students of the **Ph.D. Program in Behavioural Neuroscience**
2016-2017	Sapienza University of Rome	**Course "Methods in Behavioural Neuroscience"** (SSD M-PSI/02, **3 CFU**, Module II), LM in Neurobiology

2015-2016	Sapienza University of Rome	**Course "Methods for Studying Animal Behaviour"** (SSD M-PSI/02, **3 CFU**, Module I), LM in Neurobiology
2014-2015	Sapienza University of Rome	**Course "Methods for Studying Animal Behaviour"** (SSD M-PSI/02, **3 CFU**, Module I), LM in Neurobiology
2014	Sapienza University of Rome	**Lectures** for students of the **Ph.D. Program in Behavioural Neuroscience**
2013-2014	Sapienza University of Rome	**Course "Methods for Studying Animal Behaviour"** (SSD M-PSI/02, **3 CFU**, Module I), LM in Neurobiology
2013	Sapienza University of Rome	**Lectures** for students of the **Ph.D. Program in Behavioural Neuroscience**

2019-present	Sapienza University of Rome	**Member of the Faculty, Bachelor in Biological Sciences**
2013-2017	Sapienza University of Rome	**Member of the Faculty, Ph.D. Program in Behavioural Neuroscience** (curriculum of Psychobiology and Psychopharmacology)
2013-present	Sapienza University of Rome	**Member of the Faculty, LM in Neurobiology**

Students' evaluation (OPIS) of the course **"Introduction to Neuroscience"** for the academic year 2020-2021: in a scale from 1 to 4 (where 1 indicates 'surely not', 2 indicates 'not rather than yes', 3 indicates 'yes rather than not' and 4 indicates 'surely yes') the indicators are all above level 3, coincident or above the average for the bachelor degree in Biological Sciences and for the Faculty of Sciences, as shown in the OPIS summary reported in the attachment "titoli".

Students' evaluation (OPIS) of the course **" Methods in Behavioural Neuroscience"** for the academic year 2020-2021: in a scale from 1 to 4 (where 1 indicates 'surely not', 2 indicates 'not rather than yes', 3 indicates 'yes rather than not' and 4 indicates 'surely yes') the indicators are all above level 3, coincident or above the average for the master degree in Neurobiology and for the Faculty of Sciences, as shown in the OPIS summary reported in the attachment "titoli".

Thesis supervision:

- Bachelor's degree (Biological Sciences, Biotechnology):

Clarissa Catale, Elena Mombelli, Francesco Trenta, Dario Rettino, Andrea Di Francescantonio, Lorenza Santini, Gaia Li Vecchi, Francesca Stabile, Pierluigi Franchi, Federica Greco.

- LM Neurobiology:

Bernadette Basilico, Reeta Daswani, Francesca Stabile, Tommaso Seri, Luca Fralleoni, Matteo Santucci, Greta De Cicco.

- Ph.D. Program in Behavioral Neuroscience (curriculum: Psychobiology and Psychopharmacology)

Samyutha Rajendran (Ciclo XXX, 2014-2018). Project: Involvement of miRNAs and metabolites in inducing vulnerability to traumatic stress in an animal model.

Tommaso Seri, (Ciclo XXXIV, 2018-present). Project: Communication breakdown: Investigation of circuitry involved in a predator exposure model of traumatic stress.

Third Mission: public engagement, science dissemination, interaction with the world of education, job placement

Year	Activity
11/2019, 11/2018, 11/2017	Salone dello Studente (on behalf of LM Neurobiology and Faculty SMFN)
04-05/2019, 05/2018	Laboratori Olimpiadi delle neuroscienze 2019
2015-present	Organizing Committee, EMBL-Sapienza Neurobiology seminars and Neuroseminars (LM Neurobiology, Centre for Research in Neurobiology)
2014-present	Organizing Committee, Career Day, LM Neurobiology

Part V - Society memberberships, Awards and Honors

Fellowships

Year	Title
2013	**International Exchange Fellowship** from Royal Society of Edinburgh and Accademia Nazionale dei Lincei
2008-2010	**Marie Curie Postdoctoral Fellow** (Marie Curie Excellence Team of Dr. M.F. Nolan), University of Edinburgh
2008	**Travel fellowship** from IBRO (International Brain Research Organization)
2007	**Fellowships for laboratory teaching** in first-year biological sciences courses, Sapienza University of Rome
2006	**Travel fellowship** from SINS (Italian Society for Neuroscience)
2006	**Fellowships for laboratory teaching** in first-year biological sciences courses, Sapienza University of Rome
2005-2007	**Support fellowship** for Ph.D. student from ADISU
2004	**Travel fellowship** for undergraduate research training abroad from Sapienza University of Rome

Society memberships

I am/have been member of the Society for Neuroscience (SfN), Società Italiana di Neuroscienze (SINS), European Molecular and Cellular Cognition Society (EMCCS), European Behavioural Pharmacology Society (EBPS).

Invited peer review

- Journals

Behavioural Brain Research, Psychopharmacology, Advances in Medical Sciences, Progress in Neuro-Psychopharmacology & Biological Psychiatry, Learning & Memory, Scientific Reports, Journal of Physiology.

- Funding agencies

National Science Center (NCN, Poland – Funding Programme PRELUDIUM 2015), Istituto Superiore di Sanità (ISS, Italy - Bando Giovani Ricercatori 2008), National Research Agency (ANR, France - Generic Call 2019).

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2021	Stimolazione dei circuiti cerebrali compensatori per il mantenimento della memoria in modelli preclinici della malattia di Alzheimer (Co-PI)	Regione Lazio (Lazioinnova)	149.205 €
2020	Long-lasting structural and functional changes in the cerebellum in a preclinical model of PTSD (PI)	Research grant, Sapienza University of Rome.	11.000 €
2019	Mapping Brain Circuits in Spatial Navigation (MAPS) (Co-PI)	Human Brain Project (HBP) Voucher Program.	26.000 €
2019	In vivo effects of glucocorticoids in two mouse models of neurodevelopmental disorders (I)	Research grant, Sapienza University of Rome.	34.000€
2018	Transcriptome profiling after different kinds of stress in rodents (CPU hours on Cineca High Performance Computing (HPC) platforms) (PI)	ELIXIR-ITA CINECA	15.000 CPU hours
2018	A structural, functional, and behavioral study on the epigenetic control by histone deacetylases (HDAC) in a mouse model of Duchenne Muscular Dystrophy (I)	Research grant, Sapienza University of Rome	12.000€
2017	Chronic stress in Duchenne Muscular Dystrophy: a route to post-traumatic stress disorder? (I)	Research grant, Sapienza University of Rome	12.000 €
2016	Role of full-length dystrophin (Dp427) in the structural and functional differentiation of retina, ciliary body and iris: A study in Mdx mice (I)	Research grant, Sapienza University of Rome	8.000 €
2016	Neuroplasticity - From molecules to behaviors (PI)	Meetings and seminars organization grant, Sapienza University of Rome	1.500 €
2015	Effects of corticosteroids on the limbic system in the treatment of Duchenne Muscular Dystrophy (I)	Research grant, Sapienza University of Rome	8.000 €
2014	Disease mechanisms of working memory load capacity in ageing and Alzheimer disease (AGESPAN) (I)	Progetto di interesse "Invecchiamento" CNR	160.000 € + 20.000 € (in 2016)
2014	Fenotipizzazione del comportamento sensori-motorio in modelli animali di patologie umane (I)	Attrezzature Scientifiche, Sapienza University of Rome	41.316€
2014	Controllo colinergico della mielinizzazione in cellule di Schwann e in cellule di Schwann indotte da cellule staminali mesenchimali di ratto: possibili implicazioni terapeutiche (I)	Research grant, Sapienza University of Rome	10.000 €

2013	Neuroplasticità: dalle molecole al comportamento - Seminario permanente delle Neuroscienze – Daniel Bovet (PI)	Meetings and seminars organization grant, Sapienza University of Rome	1.500 €
2013	Molecular mechanisms underlying monogenic forms of autism characterized by endoplasmic reticulum retention of synaptic proteins (I)	Research grant, Sapienza University of Rome	12.000 €
2011	Named research assistant - Wellcome Trust Project Grant 093295/Z/10/Z awarded to M. Nolan and I. Duguid	Wellcome Trust Project Grant	300.000 £

Part VII – Research Activities

Keywords	Brief Description
Stress, PTSD, anxiety, prefrontal cortex, hippocampus, amygdala, microRNAs, transposons, immediate early genes, RNA-seq	Neural circuits and molecules involved in the response to stress
Prefrontal cortex, hippocampus, striatum, nucleus accumbens, immediate early genes, CREB, microRNAs, dopamine receptors, glutamate receptors	Neurobiology of spatial learning and memory
Motor learning, HCN1 channels, Purkinje cells, inferior olive, axon initial segment	Behavioural and electrophysiological role of non-synaptic ion channels in the cerebellum

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	21	20 indexed in Scopus, 21 indexed in WoS	2003	2020

Total Impact factor	120,46 (WoS)
Average Impact factor	6,023 (Wos)
Total Citations	578 (Scopus, 04/08/2021)
Average Citations per Product	28,9 (Scopus, 04/08/2021)
Hirsch (H) index	12 (Scopus, 04/08/2021)
Normalized H index*	0,67

*H index divided by the academic seniority.

The article "Hair et al., 2019" was published in a Journal (*BMC Research Integrity and Peer Review*) recently indexed in WoS and not yet indexed in Scopus. As the Journal is still waiting to receive the first IF, the data for this article (40 citations) have not been included in the calculation of total/mean number of citations, total/mean IF and H index.

Part IX– Selected Publications

List of the publications selected for the evaluation. For each publication report title, authors, reference data, journal IF (if applicable), citations, press/media release (if any).

1. A.Rinaldi, S.Mandillo, A.Oliverio, A.Mele (2007). D1 and D2 antagonist injections in the prefrontal cortex selectively impair spatial learning in mice. *Neuropsychopharmacology*, 32: 309-319.
   $IF_{(2007)}$=6.16, Cit=51

2. A.Rinaldi, S.Vincenti, F.De Vito, I.Bozzoni, A.Oliverio, C.Presutti, P.Fragapane, A.Mele (2010). Stress induces region specific alterations in microRNAs expression in mice. *Behavioural Brain Research*, 208: 265-269.
   $IF_{(2010)}$=3.39, Cit=113

3. A.Rinaldi, S.Romeo, C.Agustìn-Pavòn, A.Oliverio, A.Mele (2010). Different patterns of Fos immunoreactivity in striatum and hippocampus induced by different kinds of novelty in mice. *Neurobiology of Learning and Memory*, 94: 373-381.
   $IF_{(2010)}$=3.7, CIt=31

4. B.Zonta, A.Desmazieres, A.Rinaldi, S.Tait, D.L.Sherman, M.F.Nolan, P.J.Brophy (2011). Selective disruption due to loss of neurofascin reveals a role for the axon initial segment in regulating action potentials. *Neuron*, 69: 945-956.
   $IF_{(2011)}$=14.736, N.Cit.=99

5. A.Rinaldi, C.Defterali, A.Mialot, D.L.F.Garden, M.Beraneck, M.F.Nolan (2013). Specific contribution of HCN1 channels in Purkinje cells to motor learning and synaptic integration. *Journal of Physiology*, 591.22: 5691-5709.
   $IF_{(2013)}$=4.54, Cit=13

6. C.Mannironi, A.Biundo, S.Rajendran, F.De Vito, S.Caioli, C.Zona, T.Ciotti, S.Caristi, E.Perlas, I.Bozzoni, A.Rinaldi, A.Mele, C.Presutti (2018). miR-135a regulates synaptic activity and anxiety-like behavior in amygdala. *Molecular Neurobiology*, 55:3301-3315.
   $IF_{(2018)}$=5.08, Cit=25

7. U.Cappucci, G.Torromino, A.M.Casale, J.Camon, F.Capitano, M.Berloco, A.Mele, S.Pimpinelli, A.Rinaldi* and L.Piacentini* (2018). Stress-induced strain and brain region specific activation of LINE-1 transposons in adult mice. *Stress*, 21: 575-579 (*Corresponding author).
   $IF_{(2018)}$=2.17, Cit=4

8. G.Torromino, L.Autore, V.Khalil, V.Mastrorilli, M.Griguoli, A.Pignataro, E.Centofante, G.M.Biasini, V.De Turris, M.Ammassari-Teule, A.Rinaldi, A.Mele (2019). Ventral subiculum-ventral striatum communication is required for spatial memory consolidation. *Nature Communications* 10:5721.
   $IF_{(2019)}$=12.12, CIt=6

9. A.Rinaldi*, E.De Leonibus, A.Cifra, E.Minicocci, E. De Sanctis, R. Lopez Pedrajas, A.Oliverio, A.Mele (2020). Flexible use of allocentric and egocentric spatial memories activates differential neural networks in mice. *Scientific Reports*, 10, 11338 (*Corresponding author).
   $IF_{(2020)}$=4.38, Cit=2

10. T.Flati, S.Gioiosa,G.Chillemi, A.Mele, A.Oliverio, C.Mannironi, A.Rinaldi*,T.Castrignanò* (2020). Stress Mice Portal: a transcriptomic data web resource and gene expression atlas for different kinds of stress. *Scientific Data* 7, 437 (*Corresponding author).
IF$_{(2020)}$=6.45, Cit=0

Other Publications, not selected for evaluation

11. S.Mandillo, A.Rinaldi, A.Oliverio, A.Mele (2003). Repeated administration of phencyclidine, amphetamine and MK-801 selectively impairs spatial learning in mice: a possible model of psychotomimetic drug-induced cognitive deficits. *Behavioural Pharmacology*, 14: 533-544.
IF$_{(2003)}$=2.37, Cit=77

12. V.Ferretti, C.Florian, V.J.A.Costantini, P.Roullet, A.Rinaldi, E. De Leonibus, A. Oliverio, A. Mele (2005). Co-activation of glutamate and dopamine receptors within the nucleus accumbens is required for spatial memory consolidation in mice. *Psychopharmacology,* 179: 108-116.
IF$_{(2005)}$=3.99, Cit=27

13. V.Ferretti, P.Roullet, F.Sargolini, A.Rinaldi, V.Perri, M.Del Fabbro, V.Costantini, V.Annese, G.Scesa, M.E.De Stefano, A.Oliverio, A.Mele (2010). Ventral striatal plasticity and spatial memory. *PNAS*, 107: 7945-7950.
IF$_{(2010)}$=9.78, Cit=34

14. A.Rinaldi, A.Oliverio, A.Mele (2012). Spatial memory, plasticity and nucleus accumbens. *Reviews in the Neurosciences*, 23: 527-541.
IF$_{(2012)}$=3.26, Cit=20

15. F.Capitano, J.Camon, V.Ferretti, V.Licursi, F.De Vito, A.Rinaldi, S.Vincenti, C.Mannironi, P.Fragapane, I.Bozzoni, A.Oliverio, R.Negri, C.Presutti, A.Mele (2016). Micro-RNAs modulate spatial memory in the hippocampus and in the ventral striatum in a region specific manner. *Molecular Neurobiology*, 53:4618-4630.
IF$_{(2015)}$=5.4, Cit=9

16. M.Jelitai, P.Puggioni, T.Ishikawa, A.Rinaldi, I.Duguid (2016). Dendritic excitation-inhibition balance shapes cerebellar output during motor behaviour. *Nature Communications*, 7: 13722.
IF$_{(2016)}$=12.12, Cit=44

17. D.L.F.Garden, A.Rinaldi, M.F.Nolan (2017). Active integration of glutamatergic input to the inferior olive generates bidirectional postsynaptic potentials. *Journal of Physiology*, 595:1239-1251.
IF$_{(2017)}$=4.54, Cit=6

18. F.Capitano, J.Camon, V.Licursi, V.Ferretti, L.Maggi, M.Scianni, G.Del Vecchio, A.Rinaldi, C.Mannironi, C.Limatola, C.Presutti, A.Mele (2017). MicroRNA-335-5p modulates spatial memory and hippocampal synaptic plasticity. *Neurobiology of Learning and Memory*, 139:63-68.
IF$_{(2017)}$=2.88, Cit=12

19. M.Oostland, D.L.F.Garden, M.Jelitai, A.Rinaldi, I.Duguid, M.F.Nolan (2018). Inferior olive HCN1 channels coordinate synaptic integration, complex spike timing and motor learning. *Cell Reports,* 22:1722-1733. $IF_{(2018)}$=7.81, Cit=3

20. K.Hair, M.R.Macleod, E.S.Sena, The IICARus Collaboration (A.Rinaldi)* (2019). A randomised controlled trial of an Intervention to Improve Compliance with the ARRIVE guidelines (IICARus). *BMC Research Integrity and Peer Review*, 4:12 (*Member of the collaboration group).
Cit (WoS)=40

21. S.Gasparini, G.Del Vecchio, S.Gioiosa, T.Flati, T.Castrignanoò, I.Legnini, V.Licursi, L.Ricceri, M.L.Scattoni, A.Rinaldi, C.Presutti, C.Mannironi (2020). Differential expression of hippocampal circular RNAs in the BTBR mouse model for autism spectrum disorder. *Molecular Neurobiology*, 57:2301-2313.
$IF_{(2020)}$=5.59, Cit=2

Manuscript in preparation

- S.Rajendran, R.R. Daswani, M. Pino, G. Del Vecchio, E. Perlas, C. Presutti, C. Mannironi, A. Rinaldi*. Inhibition of miR-144/451a cluster in the prelimbic cortex reduces traumatic stress-induced anxiety behavior. (*Corresponding author).